SUMMARY

A total of 190 Pennant-winged Nightjar *Macrodipteryx vexillarius* weights were obtained in north-western Zambia between March 1966 and December 1967. Birds weighed in March were heavier than birds weighed at other times, presumably as a result of increased fat deposits prior to migration.

Females were heavier than males in September (the period prior to egg-laying), though a sexual difference in weight is probably slight at other times; male wings are very much longer than female wings.

The contents of 44 stomachs were weighed in the period September-December 1967. The amount of food in the stomach is extremely variable (0.1–15.0 gm.). Adult males obtained in October had less food in their stomachs than those in September, though the reason for this is not known. There is positive correlation between body weight and weight of stomach contents if September and October birds are considered separately.

Birds dissected in September-December had little visible fat deposit; no March birds were dissected.

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The white-eye *Zosterops maderaspatana* (Linn.) of Menai Island, Cosmoledo Atoll

by C. W. Benson

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Since the comprehensive review of variation in the western Zosteropidae by Moreau (1957), there has been further collecting on some islands in the western Indian Ocean, leading to a fuller understanding of variation in this family in these particular areas: see Benson (1960: 88–91), who studied the Comoro forms, and Storer & Gill (1966), *Z. borbonica* (Gmelin) in Réunion and Mauritius.

I spent most of January to March 1968 on the Aldabra Atoll, during Phase III of the Royal Society Aldabra Expedition. I was also able to make brief visits to certain neighbouring islands—Astove on 5th March and the Cosmoledo complex the following day. For descriptions of these and other islands north of Malagasy (formerly Madagascar) see Watson *et al.* (1963) and Stoddart (1967). Astove is a single island, but Cosmoledo consists of a series of islands, of which the largest is Menai, about 1¾ miles long by ½ mile wide. Moreau (1957: 416, 428) had only one specimen of *Z. maderaspatana* available from Cosmoledo, and none from Astove. I visited both Menai and Wizard Islands in the Cosmoledo Atoll, but saw no white-eye on either, though have been lent two specimens in the Peabody Museum of Natural History, University of Yale, collected by Dr. W. D. Hartman on Menai in December 1957. I did find white-eyes on Astove, and two specimens were collected; in addition I have been lent two collected by I. Parker there in October 1967. Other recent material consists of 12 specimens from Aldabra; the material in the British Museum (Natural History) which was available to Moreau has also been used.

I agree with Moreau (*op. cit.*: 397) that only one subspecies can be maintained for Malagasy, namely nominate *maderaspatana*. Birds which are most markedly yellowish above occur in drier areas in the south-west and in the extreme north, with purer green ones in intervening more humid areas, especially in the east. As Moreau states, too (*op. cit.:* 416, note 35), Gloriosa birds cannot be separated from the yellowest of Malagasy ones. On the other hand, Astove birds lack the yellowish tone above of those from Gloriosa, and not one of the former has any of the yellow wash on the grey belly noted by Moreau in most of the latter. The Astove birds can, however, be matched with specimens from the more humid parts of Malagasy. But for the situation in Malagasy described by Moreau, one might well be disposed to recognise the Gloriosa and Astove populations as subspecifically distinct from each other. Presumably Gloriosa has an appreciably drier climate than has Astove. Aldabra birds also incline to yellowish above, in comparison with those from Astove, but not so markedly as the Gloriosa birds. Probably Aldabra has less rain than has Astove, and see Benson & Penny (1968: 106), who draw attention to a reduction of melanin in several species of land bird on Aldabra, in an apparently fairly dry climate. Incidentally, an Aldabra specimen of *Z. maderaspatana* collected by W. L. Abbott in 1892, in the University Museum of Zoology, Cambridge, can be matched with some collected there in 1968, so that the possibility of *post mortem* changes in colour in the course of the years does not seem to arise.

There remains for description and discussion the position of three specimens from Menai Island, Cosmoledo. These are sufficiently distinct to require designation by name:

Zosterops maderaspatana menaiensis, subsp. nov.

Type: Male, skull fully ossified, 15th April 1952, Menai Island, Cosmoledo Atoll, collected by D. Vesey FitzGerald; in the British Museum (Natural History), registered number 1952. 60. 28.

Description: Nearest to *Z. m. maderaspatana* of Astove and the more humid areas of Malagasy, mainly in the east, but paler green above; yellow of throat and under tail-coverts decidedly paler than in any population of *Z. m. maderaspatana*, or in *Z. m. aldabrensis* Ridgway.

Colour of soft parts of type: Bill black, basal half of lower mandible blue-grey; feet blue-grey; irides brown.

Measurements of type: Wing 56, tail 36, culmen (from base of skull) 13 mm.

Remarks: Hartman's two specimens (Peabody Museum numbers 40929 and 40930) from Menai, dated 11th and 12th December, 1957, both unsexed, show the same pallor as described for the type. One is in worn dress, the other in fresh dress and apparently immature. The yellow on the throat of the latter is particularly pale. But above all, these two are of interest in that they are both partially grey and partially green on the upperside, unlike the type (collected some five years earlier), which is wholly green above. The two colours fall into no regular pattern, and some individual feathers even show the two colours. There is no reason to suppose that they have been artificially discoloured, since none of 17 other specimens lent to me from the Peabody Museum, collected by Hartman on the same expedition (Hartman, 1958), show any peculiarity. In Cambridge there are seven specimens of *Z. m. anjouanensis* E. Newton which were skinned after 11 years of soaking in alcohol. These are uniformly, not irregularly, paler green above (no sign of grey) and paler yellow on the throat than in specimens of this subspecies skinned at the time of collecting, and rightly caused A. & E. Newton (1888) to regard *Z. praetermissa* Tristram as the same as *anjouanensis;* see also Moreau (*op. cit.:* 409, note 2). Moreau (*op. cit.*) also draws attention to *Z. hovarum* Tristram, founded on a single specimen, probably from Malagasy, and perhaps no longer in existence. It would seem from Tristram's description that the normal green colour above of *Z. maderaspatana* has been entirely replaced by grey. But the specimen is illustrated in colour in *Ibis*, 1887 (plate XI, fig. 2), and this figure does faintly indicate the asymmetrical presence of some green as well as grey. Delacour (1932: 79), who examined the specimen, states that the figure is a very exact representation. Thus the type of *hovarum* and Hartman's two specimens from Menai Island may resemble each other closely, representing the same kind of individual abnormality. Unfortunately, as already related, no white-eye was seen on Menai during my short visit in March 1968. On Aldabra any grey-backed abnormality could only be extremely rare. White-eyes are plentiful there, but only wholly green-backed birds were ever noticed by M. J. Penny and others as well as myself during the period August 1967 to March 1968.

The following is a summary of measurements in mm. of the material most closely concerned with this study:

Number of specimens	*Wing*	*Tail*	*Culmen from base*
	Gloriosa (*Z. m. maderaspatana*)		
7	55–58 (56.6)	37–39 (38.6)	13–15 (13.9)
	Astove (*Z. m. maderaspatana*)		
4	55–56 (55.3)	35–38 (36.2)	13–13.5 (13.2)
	Cosmoledo: Menai Island (*Z. m. menaiensis*)		
3	54, 56, 56	36, 36, 37.5	13, 13, 13.5
	Aldabra (*Z. m. aldabrensis*)		
15	49–54 (51.7)	36–42 (39.2)	11.5–13.5 (12.5)

The wing-lengths suggest that the Aldabra birds are smaller than those from the other three islands, though proportionately longer in the tail. The ratio 100 × tail/wing for the four islands works out respectively at 68.2, 65.5, 66.0, 75.5. This bears out rather closely the results obtained by Moreau (*op. cit.:* 428), who had only four specimens from Aldabra. The larger size of Astove than Aldabra birds is borne out by weights. The four from Astove weighed 9.8–11.5 (10.6), 12 of those from Aldabra 6.75–9.3 (8.2) gms. An exceptionally large Aldabra specimen—the only one with a wing-length of as much as 54 mm., a female—weighed 10.5 gms. Nine other Aldabra birds, mist-netted by A. W. Diamond or A. W. Hutson, and released after examination, had wing-lengths of 51–52 mm., and weighed 6–9 (7.6) gms. Incidentally, according to Benson (1967: 106) there is no white-eye on Assumption, and none was seen when I was on that island on 15th/16th September, 1967, after an earlier visit to Aldabra.

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Additional information on the carpometacarpal process as a taxonomic character

by C. J. O. Harrison

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Pocock (1966) examined some osteological characters of African birds and found a consistent pattern in the presence or absence of a process on the outer edge of the carpometacarpus. He considered that this process had some taxonomic significance and that it could be used to show relationships between passerine taxa. He separated the passerines into two groups on the